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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,168	05/15/2002	Thomas Lenzing	10191/2054	8513

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EXAMINER

THOMPSON, JEWEL VERGIE

ART UNIT PAPER NUMBER

.2855

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,168

Applicant(s)

LENZING ET AL.

Examiner

Jewel V Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. Acknowledgement is made of the Information Disclosure Statement filed May 15, 2002, which has been made of record and placed in the file.

Priority

2. Acknowledgement is made of the Priority filed May 15, 2002, which has been made of record and placed in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-20, 23, 31, 32 and 34 rejected under 35 U.S.C. 102(b) as being anticipated by Hecht et al 5,918,279).

Regarding claim 17, Hecht et al teaches a device for measuring at least one parameter of a medium flowing in a main direction of a flow in a line, comprising: a measuring element (14) circumflowed by the medium (fig. 1) and positioned in the line

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(fig. 1); and at least one constriction (21) configured to produce acoustic disturbances and positioned in the line (fig. 1) wherein the constriction includes a mechanical-acoustic prevention element (col. 3, lines 63-68).

Regarding claim 18, Hecht et al teaches the at least one parameter includes to a mass flow (col. 2, lines 53 and 54)

Regarding claim 19, Hecht et al teaches the mass flow includes an intake air mass flow of a n internal combustion engine (col. 2 lines 53-55)

Regarding claim 20, Hecht et al teaches at least one element (20) positioned in the line (fig. 1) and configured to reduce an impact of one of fluid and solid particles on the measuring element

Regarding claim 23, Hecht et al teaches each prevention element includes a radial elevation arranged along a radial circumferential line of the line (fig. 3).

Regarding claim 31, Hecht et al teaches the at least one prevention element is rounded against the main direction of flow (fig. 3)

Regarding claim 32, Hecht et al teaches comprising a flow straightener (20) provided in the line and integrated into a rigid conduit that is insertable into the line (fig. 2), the at least one prevention element provided as a single unit on the rigid conduit (fig. 2)

Regarding claim 34, Hecht et al teaches the at least one prevention element is configured as a single unit with a wall of the line (fig. 2)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 22, 29, 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hecht et al in view of Tank et al (6,272,920).

Regarding claim 21, Hecht et al fails to teach the element configured to reduce the impact of one of the fluid and solid particles includes a tubular body having a flow channel through which the medium flows, the measuring element located in the tubular body. Tank et al teaches a device to measure the mass of a medium flowing in a line comprising a tubular body (3) wherein the measuring element is located in the tubular body. It would have been obvious to one skilled in the art at the time that the invention was made to have used the tubular body of Tank et al in the mass flow meter of Hecht et al for the purpose of acting as a rectifier (col. 4, lines 27-35)

Regarding claim 22, Hecht et al teaches the element configured to reduce the impact of one of fluid and solid particles includes a protective screen located in one the line and the tubular body (col. 4, lines 27-32)

Regarding claim 29, Hecht et al teaches the line includes a center line, the acoustic prevention element including an aperture provided in the line and having a

radial limiting line, radial distance between the radial limiting line and the center line varying in a radial circumferential direction (fig. 1 and fig. 3)

Regarding claim 30, Hecht et al fails to explicitly teach that the at least one prevention element is wave-shaped. Hecht et al does however teach that the at least one prevention element is round (fig. 3). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have the radial limiting line wavy for the purpose of reducing flow disturbance, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art, (M.P.E.P. 2144.04). It would have been to have recognized that merely changing the shape of the radial limiting line does not move away from the scope of the invention

Regarding claim 33, Hecht fails to teach at least one prevention element is provided as a single unit on a rigid conduit that is insertable into the line. Hecht et al does teach at least one prevention element is provided as a single unit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the element insertable in to the line for the purpose of maintaining the element, since it has been held that making an old device portable or movable without producing any new unexpected results involves only routine skill in the art (M.P.E.P. 2144.04)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hecht et al in view of Erfinder (DE19735373

Regarding claims 24-28. Hecht et al fails to teach each prevention element includes a radial elevation arranged along a radial circumferential line of the line; the radial elevation includes a rectangular cross-section arranged at a right angle to the main direction of flow; the radial elevation includes a trapezoidal cross-section arranged at a right angle to the main direction of flow; the radial elevation includes one of an oval and a circular cross-section arranged at a right angle to the main direction of flow; radial elevations are evenly spaced in relation to one another along a radial circumferential line of the line and the radial elevations have a same shape. Erfinder teaches a rectifier in the shape of a honeycomb through which the intake air flows comprising edges which, may be buldges, wavy or pointed (abstract and figs. 2, 3, 5, 7 and 9). It would have been obvious to one skilled in the art at the time that the invention was made to have used the rectifier of Erfinder in the flow meter of Hecht et al for the purpose of generating eddies in the flow of the medium (abstract)

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 703-308-6726. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1134.


jvt


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